

TILES

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BASIC INFORMATION

Ingredients and Processes : Gradings
Sizes : Shapes : Colors : Finishes
Nomenclature



Prepared by
THE ASSOCIATED TILE MANUFACTURERS

BEAVER FALLS, PA.

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THIS PUBLICATION

is issued for the use of architects, engineers, and educators, in the belief that it will prove of value and interest in acquainting them with the characteristics, sizes, shapes, and colors of tiles, and methods of production, in so far as they tend to promote a more thorough understanding of this product and its uses.

The basis upon which are determined the regular sizes of tiles is described and illustrated on page 1. This, with the shapes developed as shown on page 2, permits tiles of varying sizes, shapes, and colors to fit together in almost any conceivable pattern or arrangement. Some of the possibilities of forming squares from three and four sided figures, which but faintly indicate the almost limitless array of patterns, are shown on page 10.

The kinds of tiles are so extensive, from those used for the most ornamental features of a building to the simplest sanitary floor, that in addition to describing the processes in the text which follows the tiles now made are grouped by kinds and names on the first page of the Schedule.

On the succeeding pages will be found information relating to the characteristics of each kind or make of tiles, with statements concerning the grades, colors, and sizes produced by the manufacturers.

These pages are followed by plates of drawings showing graphically, and to scale, the shapes and relative proportions of tiles, classified according to kind.

If this publication serves the purpose of acquainting designers and users of tilework, in a greater degree than heretofore, with the materials now at their command in securing effects and accomplishing results to their lasting satisfaction, it will be a source of gratification to

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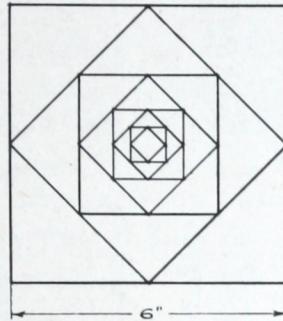
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THE BASIS OF TILE SIZES

All "regular" sizes of modern tiles are based upon a geometrical retrogression from a six inch square, inherited from medieval potters and still in use to this day.

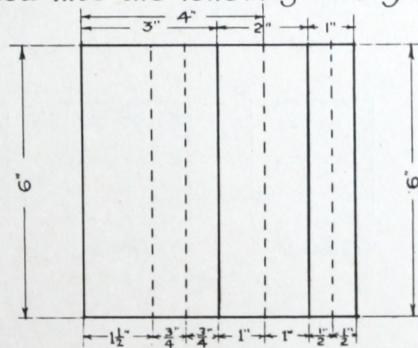
The following illustration shows the methods of division into shapes which result in squares of the sizes given, with their related diagonal halves and quarters.

SQUARES
 $6'' \times 6''$, $4\frac{1}{4}'' \times 4\frac{1}{4}''$, $3'' \times 3''$, $2\frac{1}{8}'' \times 2\frac{1}{8}''$,
 $1\frac{1}{2}'' \times 1\frac{1}{2}''$, $1\frac{1}{16}'' \times 1\frac{1}{16}''$, $\frac{3}{4}'' \times \frac{3}{4}''$, $\frac{1}{2}'' \times \frac{1}{2}''$



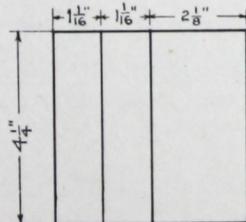
DIAGONAL HALVES
 $6'' \times 6''$, $4\frac{1}{4}'' \times 4\frac{1}{4}''$, $3'' \times 3''$, $2\frac{1}{8}'' \times 2\frac{1}{8}''$,
 $1\frac{1}{2}'' \times 1\frac{1}{2}''$, $1\frac{1}{16}'' \times 1\frac{1}{16}''$, $\frac{3}{4}'' \times \frac{3}{4}''$

The three larger squares resulting from this geometrical pattern are again divided into the following oblong shapes and sizes.



SIX INCH OBLONGS.

$6'' \times 4''$, $6'' \times 3''$, $6'' \times 2''$, $6'' \times 1\frac{1}{2}''$, $6'' \times 1''$, $6'' \times \frac{3}{4}''$, $6'' \times \frac{1}{2}''$

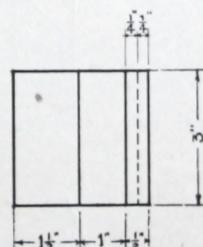


$4\frac{1}{4}''$ OBLONGS

$4\frac{1}{4}'' \times 2\frac{1}{8}''$, $4\frac{1}{4}'' \times 1\frac{1}{16}''$

3" OBLONGS

$3'' \times 1\frac{1}{2}''$, $3'' \times 1''$, $3'' \times \frac{3}{2}''$, $3'' \times \frac{1}{4}''$

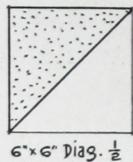


Other shapes in common use are those derived from the Octagon, Hexagon and other geometrical figures, which, together with the resultants of the above sub-divisions are shown on the reverse of this sheet.

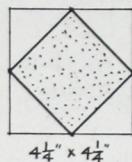
THE DEVELOPMENT OF TILE SHAPES



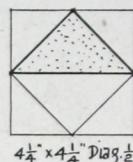
6" x 6"



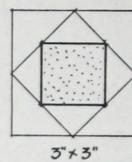
6" x 6" Diag. $\frac{1}{2}$



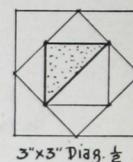
4 1/4" x 4 1/4"



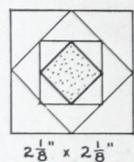
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3" x 3"



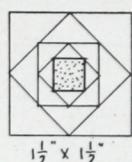
3" x 3" Diag. $\frac{1}{2}$



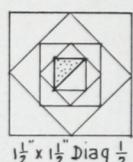
2 1/8" x 2 1/8"



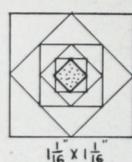
2 1/8" x 2 1/8" Diag. $\frac{1}{2}$



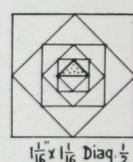
1 1/2" x 1 1/2"



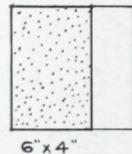
1 1/2" x 1 1/2" Diag. $\frac{1}{2}$



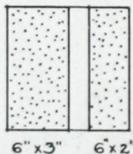
1 1/16" x 1 1/16"



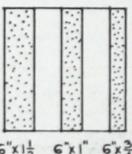
1 1/16" x 1 1/16" Diag. $\frac{1}{2}$



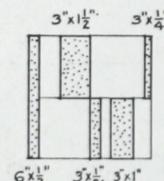
6" x 4"



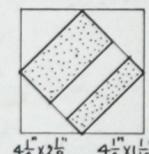
6" x 3"



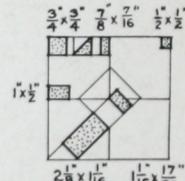
6" x 2"



3" x 1 1/2" 3" x 1/4"

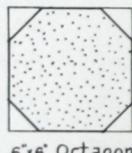


4 1/4" x 2 1/8" 4 1/4" x 1 1/16"



3/4" x 3" 7/8" x 7/16" 1/2" x 1/2"

1" x 1" 2 1/8" x 1 1/16" 1 1/16" x 1 1/32"



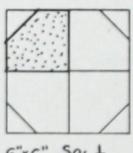
6" x 6" Octagon



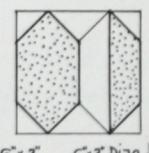
6" x 6" Diag. $\frac{1}{2}$



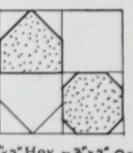
6" x 6" Sq. $\frac{1}{2}$



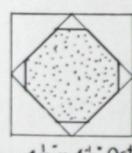
6" x 6" Sq. $\frac{1}{4}$



6" x 3"



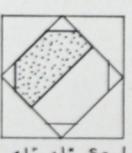
6" x 3" Hex. - 3" x 3" Oct.



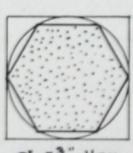
4 1/4" x 4 1/4"



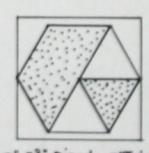
4 1/4" x 4 1/4" Diag. $\frac{1}{2}$



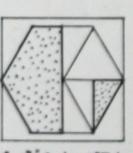
4 1/4" x 4 1/4" Sq. $\frac{1}{2}$



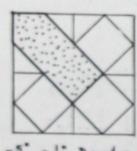
6" x 5 3/16"



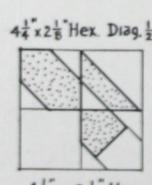
6" x 5 3/16" Diag. $\frac{1}{2}$



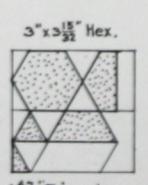
6" x 5 3/16" Sq. $\frac{1}{2}$. 3" Triangle Diag. $\frac{1}{2}$



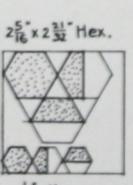
5 5/16" x 2 1/8"



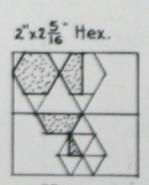
4 1/4" x 2 1/8" Hex. Diag. $\frac{1}{2}$



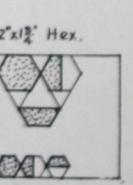
3" x 3 15/32"



2 5/16" x 2 31/32"



2" x 2 5/16"



1" x 1 1/8"

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TILES

The word "tile" has its origin in the Anglo-Saxon "tigel," which in turn is a derivative of the Latin "tegula," from *tego*, to cover. Although since appropriated to designate other products made in all sorts of shapes and from all kinds of raw materials, the term "tile" without other qualifying words or phrases still properly applies to those examples of the ceramic art which are used as a surfacing or finish for floors, walls, and ceilings for decorative and sanitary purposes on the interior or exterior of buildings.

INGREDIENTS AND PROCESSES

Tiles are made either from natural clays or from different kinds of clays, feldspars, and flints which are obtained from domestic banks and quarries or imported from other countries, and are selected, proportioned, and mixed according to the kind of tiles to be manufactured. These raw materials undergo a variety of refining and mixing processes before they become suitable for forming or pressing into tiles.

According to the process used, tile makers distinguish between tiles made from the materials in the plastic state and those pressed by means of machinery from the pulverized and practically dry materials—the "dust," as it is called. Thus, in the one case, the tiles are made "plastic;" in the other case they are "dust-pressed."

Such tiles as Faience are made by the plastic process, and such tiles as Vitreous Tiles and the "bodies" of Glazed Tiles are of the dust-pressed type.

THE PLASTIC PROCESS

In this process, the clays are mixed with water and run through pugging machines until of a uniform plastic consistency. In this condition they are pressed either by hand or machine in dies or moulds, and after

drying are put into burned clay containers known as saggars, in which they are sent through the kilns and fired. The plastic nature of the materials has a tendency to produce tiles that vary slightly from the true geometric shapes and bring about the pleasing irregularity characteristic of plastic-made tiles.

THE DUST-PRESSED PROCESS

In this process, the materials, after being finely ground and mixed with water, are passed into filter presses where the excess water is pressed out.

The resulting mass is dried and pulverized and then pressed into shape in metal dies. Every piece is inspected, fettled if necessary to remove feather edges, and is then placed in the saggars and sent through the kilns. The tiles in this unburned state are called "green" tiles.

FIRING AND GLAZING

All tiles undergo one or more firings at high temperatures in kilns.

UNGLAZED TILES

These are produced in one firing which brings them to their respective degrees of vitrification, colors, and surface textures.

The colors in unglazed tiles are produced either by the selection of clays that will burn to the desired colors, or by the addition of certain oxides, such as the oxides of cobalt, chromium, etc. It lies in the nature of the raw materials and color ingredients that some can be fired to complete vitrification, while others do not permit this because physical destruction of the product would result. Consequently, the unglazed tiles are burned either vitreous or semivitreous, according to their colors as listed in the Schedule. Kidder's Handbook describes the vitreous as "the hardest tiles known, cannot be scratched by steel or sand, and are non-absorbent and thoroughly aseptic."

GLAZED TILES

The "green" tiles, which ultimately are to be given a glazed surface, are first fired in the biscuit kiln at a temperature of over two thousand degrees Fahrenheit.

This firing produces the "biscuit," "bisque," or "body," made either plastic or by the dust-pressed method. This biscuit is subsequently coated with the glazing liquid, made from pulverized flint, feldspar, clay, and a

flux, and is placed in the gloss kiln, where it is subjected to slightly lower temperatures which produce the glaze and unite it with the biscuit.

The resulting silicious coating is known by the generic term "glaze," and manufacturers technically differentiate between glazes, enamels, and dull finishes according to the ingredients and characteristics of the coating.

Trade custom, however, has extended the application of the word "enamels," for instance, to designate a kind of tiles; namely, those having a white body and a *bright finish colored* glaze. On the other hand, the same kind of tiles with a *colorless* glaze are commonly called White Glazed Tiles. Conversely, the white tiles generally used for wainscots in bathrooms are called Glazed, and the same tiles with a colored glaze in a bright finish are spoken of as Enamels.

Both glazes and enamels are entirely vitreous coatings.

COLORS

The colors of Dull and Matt Glazed Tiles and Faience are produced by various metallic oxides which stain the base or flux of the glaze while it is in a state of fusion. Certain color effects, particularly in Faience, require more than one firing. In such cases the temperature of the kiln has to be changed or adjusted to different fusion points at which the ingredients of the successive glazings develop the various colors.

An important practical property of all colored glazes and enamels is that of being entirely non-fading.

The range of colors and tints is almost unlimited and virtually any color effect or combination can be obtained.

SURFACE TREATMENT

The glazes and enamels are so proportioned and so fired that, as predetermined by the effect desired or texture to be obtained, the surface will result in a bright, dull, or matt finish. The bright have a surface of high gloss, the matt are entirely devoid of gloss, and the dull finishes lie intermediate between these extremes. Finishes such as eggshell, vellum, orange skin, crocodile skin, crystalline, etc., are varieties of the dull and matt, and present an extensive line of surface textures.

CRAZING

This is the term given to minute crackling which sometimes becomes visible on the surface of glazed ware.

Tiles cannot be guaranteed against crazing.

In former years, manufacturers were willing to guarantee glazed tiles against crazing. This, however, is not now done or required, since producers and specification writers alike realize that crazing of a glazed surface cannot be absolutely controlled.

One of the causes of the phenomenon known as crazing is the slightest kind of a difference in the coefficients of expansion and contraction between the materials of the body and those of the glaze.

Other more frequent causes of crazing have been traced to unequal settlement and to the expansion and contraction of foundations, as well as to physical and chemical changes which may take place in backgrounds and foundations upon which tiles are set.

SORTING AND GRADING

Tiles are not, and cannot be, manufactured in predetermined grades or qualities. The object of the makers is to produce but one grade, viz., the highest obtainable with the materials and forces at their disposal. But, because of limitations in the processes and the difficulty of absolute control in firing conditions, certain variations in shades, sizes, etc., take place which are inherent in the manufacture of clay products.

Tile makers therefore sort the tiles, after they come from the kilns, into different grades which experience and the requirements of the consumer have established as expedient. With respect to wearing and sanitary qualities no difference exists in these grades, as surface blemishes, warpage, and appearance alone are the basis for the grading.

The sizes and thicknesses tabulated in the Schedule and shown by the drawings for various kinds of tiles should always be considered as subject to slight variations, or "tolerances," as in the case of all clay products, since the materials and forces of nature employed in their production are not susceptible to complete control.

Grades should be considered from the appearance of the tiles in the mass, since no single tile can be truly representative of any particular grade.

SHADING

The exact shade of tiles depends largely upon the degree of heat to which they have been exposed in the firing, and as absolutely uniform heat

cannot be maintained in all parts of the kiln, necessarily there results a very slight difference in the shade, detectable only by the trained eye of the sorter. Manufacturers, in addition to grading, therefore, separate White Glazed Tiles so that each "lot" is of practically the same shade.

GRADING

The gradings in tiles are the natural consequence of relative productivity, which varies with the different kinds of tiles according to materials and processes involved. In White Glazed Tiles three classifications result. In Enamels the production results are divided into two classifications. In the case of Vitreous Tiles, the nature of the basic materials and the processes are such that while two grades result, the Commercial grade is of relatively small proportions, and should therefore be only sparingly specified. In the Semivitreous, the tiles other than Selected are so few in number that they are not marketed.

WHITE GLAZED TILES

These are graded and marketed under three classifications—Selected, Standard, Commercial. Each grade has its legitimate uses. The tiles that are as nearly perfect as it is possible to manufacture are chosen, and marketed as Selected for use in the finest class of tilework. The Standard grade is the one suitable for use in the greatest number of cases, as the term implies. The Commercial grade finds extensive use where economy, service, sanitation, and light-reflecting qualities are required and where manufacturing blemishes are of secondary importance.

ENAMELS AND VITREOUS TILES

These are marketed in two grades—Selected and Commercial. The Selected in these, as in the White Glazed Tiles, are as nearly perfect as it is possible to manufacture for use in the finest class of tilework. The Commercials similarly are marketed for purposes where economy, service, and sanitation are required, and where manufacturing blemishes are of secondary importance or contribute to the effect desired. In the Vitreous Tiles, but few of the Commercial grade are available, as before mentioned, and the Semivitreous Tiles are marketed in one grade only, Selected.

These examples will suffice to illustrate the requirements and pur-

poses in connection with the gradings. For these and other kinds of tiles the grades are listed under the respective headings in the Schedule.

CERTIFICATE

Certificates stating grades, quantities, and methods of identification are furnished upon request on the special form of the Association by members of The Associated Tile Manufacturers. The furnishing of such certificates should be stipulated in specifications for tilework. (See Basic Specifications of The Associated Tile Manufacturers, in which such a clause is incorporated.)

ASSOCIATED TILE MANUFACTURERS FORM OF GRADE CERTIFICATE

This is to Certify

that the tiles contained in the packages included in the shipment enumerated and described below, have been carefully inspected and are of the grade or grades as stated in the last column.

The package certificates which are placed in each container correspond with the identifications of this master certificate.

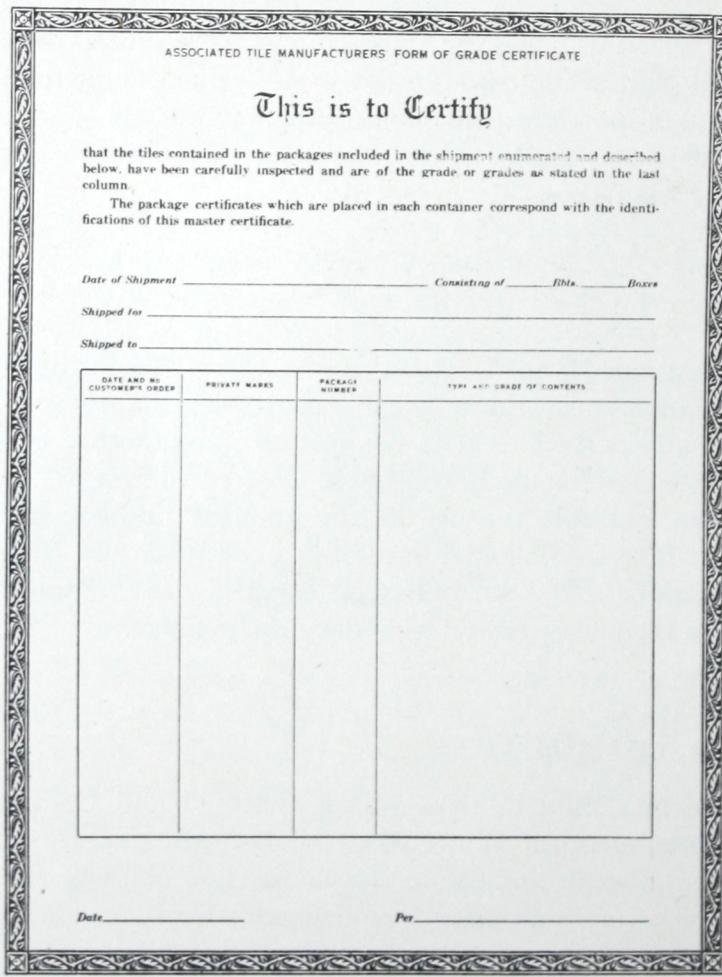
Date of Shipment _____ *Consisting of* _____ *lbs.* _____ *Boxes*

Shipped for _____

Shipped to _____

<small>DATE AND NO. CUSTOMER'S ORDER</small>	<small>PRIVATE MARKS</small>	<small>PACKAGE NUMBER</small>	<small>TYPE AND GRADE OF CONTENTS</small>

Date _____ *Per* _____



WORKMANSHIP

Tilework is judged according to its appearance after being set in place, and the skill of the tilesetter plays almost as important a part as the

tiles. An indifferent unskilled workman may not be able to produce so good a finished effect using Selected as a skilled setter will by using Standard tiles. It is well to bear this in mind in connection with specifications and supervision.

KINDS OF TILES

According to their intended uses tiles are often referred to as floor tiles, wall tiles, etc. These terms which have found their way into the nomenclature of the industry do not invariably indicate limitations of use; for example, floor tiles may be and frequently are used for walls. Ceramic Mosaic, made originally for wearing surfaces of floors, is also largely used for vertical surfaces.

The kinds of tiles, and the names given to each by the manufacturers, are listed on the first page of the Schedule which follows.

REGULAR AND SPECIAL SIZES AND SHAPES

Tiles are produced in a great variety of regular sizes and shapes, facilitating the fullest expression in design for all decorative effects and utilitarian requirements. They are listed in the Schedule and shown by the drawings which follow.

The production of special sizes and shapes in dust-pressed tiles involves special dies and handling, and deviation from the regular routine of manufacture. In Plastic Tiles and Faience, however, special shapes may be produced without distinct departure from the methods of production common to the regular tiles.

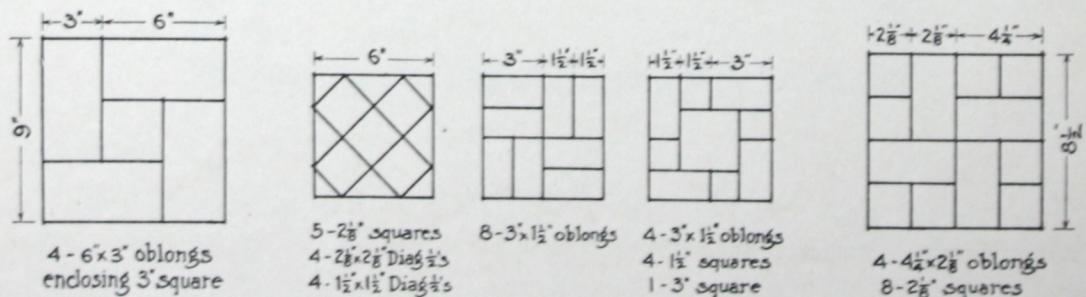
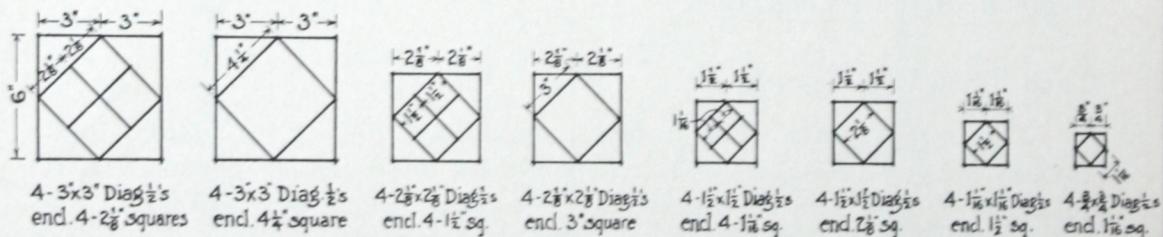
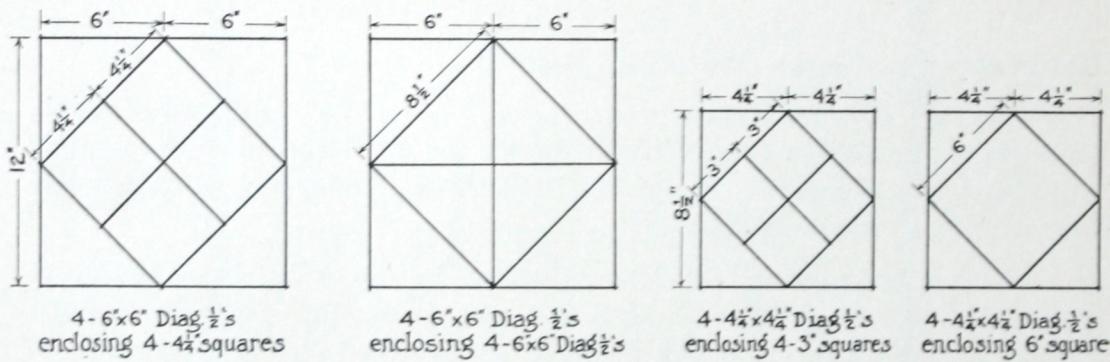
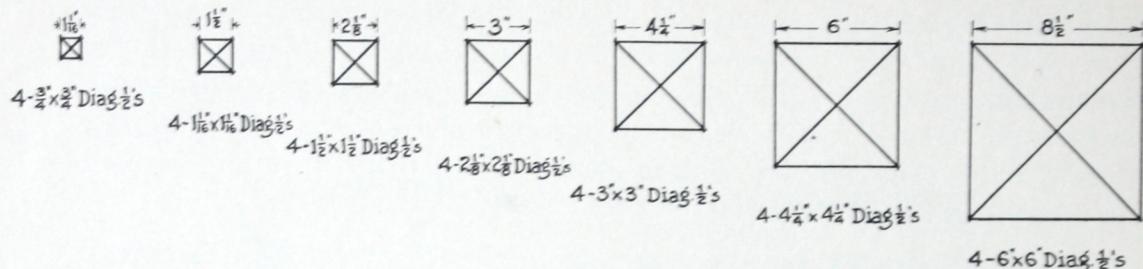
TRIM TILES, OR TRIMMERS

For use as bases, caps, corners, mouldings, angles, architraves, etc., certain shaped tiles are made to match the unglazed or glazed field of tilework. These are designated by the term Trim, or Trimmers. The range of shapes obtainable in these trimmers is extensive enough to meet any decorative or utilitarian demand.

SOME SQUARE FORMATIONS WITH TILES

The following illustrations indicate some of the possibilities of forming squares with diagonal halves, oblongs, and smaller squares.

These point the way to patterns, and illustrate reasons for and uses of the diagonal halves, as well as built-up squares larger than the manufactured sizes.



SCHEDULE OF TILES
GIVING NOMENCLATURE, DESCRIPTIONS,
GRADES, COLORS, AND SIZES

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Dull Glazed Mosaic
Matt Glazed Mosaic

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PLASTIC TILES

FAIENCE

MOSAIC

CERAMIC MOSAIC. This is the collective term for unglazed dust-pressed tesserae $\frac{1}{4}$ inch thick and less than $2\frac{1}{4}$ square inches in area. These are vitreous or semivitreous as listed.

ENAMEL MOSAIC are Ceramic Mosaic tesserae of any of the regular sizes, shapes, and body colors as listed when glazed with a bright finish *colored* glaze. The glaze may be transparent, translucent, or opaque, and the body color accordingly may or may not be visible through the colored glaze.

GLAZED MOSAIC are Ceramic Mosaic tesserae of all sizes, shapes, and body colors as listed when glazed with a *bright finish, clear, colorless* glaze. Because of the transparency of the glaze, the body color of the tesserae is retained and the range of colors is limited to those in which unglazed Ceramic Mosaic is made.

DULL GLAZED MOSAIC are Ceramic Mosaic tesserae of any of the regular sizes, shapes, and body colors when glazed with a *dull finish white or colored* glaze.

MATT GLAZED MOSAIC are Ceramic Mosaic tesserae of any of the regular sizes, shapes, and body colors when glazed with a *matt finish white or colored* glaze.

PLASTIC MOSAIC. This term is used as a designation for tesserae of any shape or size less than $2\frac{1}{4}$ square inches in area made by the plastic process, in colors that result from the firing of natural clays.

FAIENCE MOSAIC. This term is used as a designation for all plastic mosaic tesserae when glazed. The glazes may be bright, dull, or matt finish. Colors should be selected from samples and specified by the numbers which the member factories use for identification purposes.

MOUNTING. All Mosaic is regularly furnished mounted on paper in sheets about 2 ft. x 1 ft., but can also be obtained loose.

CUT MOSAIC. This is the trade term for unglazed, dust-pressed, vitreous or semivitreous strips, $\frac{1}{4}$ inch thick, and either $6 \times 5\frac{1}{8}$, $3 \times 5\frac{1}{8}$, or $3 \times 1\frac{1}{2}$ inches in size, which are made for cutting into irregular tesserae necessary in the production of ungeometrical designs and pictorial work. The colors include all Unglazed Ceramic Mosaic colors and granites. Furnished in loose strips or in assembled designs mounted on paper.

TRIMMERS. These include combination quarter-rounds and coves, and outside and inside angles, for use with flat mosaic tiles.

CERAMIC MOSAIC

VITREOUS	SEMIVITREOUS
GRADES Selected only (except white, of which a small quantity of the commercial grade is available)	GRADES Selected only
COLORS White, celadon, silver gray, green, blue green, light blue, dark blue, pink, cream, and "granites" of these colors	COLORS Buff, salmon, light gray, dark gray, red, chocolate, black, and "granites" of these colors
SIZES Square $\frac{3}{4}''$ $\frac{1}{2}''$ Oblong $2\frac{1}{16}'' \times 1''$ $1\frac{1}{16}'' \times \frac{1}{2}''$ Hexagon $1\frac{1}{4}''$ $1''$ Round $\frac{13}{16}''$	SIZES Square $\frac{3}{4}''$ $\frac{1}{2}''$ Oblong $2\frac{1}{16}'' \times 1''$ $1\frac{1}{16}'' \times \frac{1}{2}''$ Hexagon $1\frac{1}{4}''$ $1''$ Round $\frac{13}{16}''$
THICKNESS $\frac{1}{4}''$	THICKNESS $\frac{1}{4}''$

VITREOUS AND SEMIVITREOUS TILES

VITREOUS AND SEMIVITREOUS TILES. These are group designations for unglazed dust-pressed tiles $\frac{1}{2}$ inch thick. They are vitreous or semivitreous according to color.

GLAZED VITREOUS AND SEMIVITREOUS TILES are the Vitreous and Semivitreous Tiles as listed when glazed with a bright, clear, and colorless glaze. The principal characteristic of these tiles is that, because of the transparency of the glaze, the body color is retained. The range of colors is limited to those in which unglazed Vitreous and Semivitreous Tiles are made.

DULL GLAZED VITREOUS AND SEMIVITREOUS TILES are tiles of any of the regular sizes, shapes, and body colors as listed when glazed with a *dull finish* white or colored glaze.

MATT GLAZED VITREOUS AND SEMIVITREOUS TILES are tiles of any of the regular sizes, shapes, and body colors as listed when glazed with a *matt finish* white or colored glaze.

VITREOUS AND SEMIVITREOUS TRIMMERS are unglazed, dust-pressed, standardized shapes to serve as coves, quarter-rounds, angles, bases, etc. They are also furnished, when necessary, with glazes corresponding to those of the flat tiles.

VITREOUS AND SEMIVITREOUS TILES

VITREOUS	SEMIVITREOUS
GRADES Selected and Commercial	GRADES Selected only
COLORS White, celadon, silver gray, green, blue green, light blue, dark blue, pink, cream, and granites of these colors	COLORS Buff, salmon, light gray, dark gray, red, chocolate, black, and granites of these colors
SIZES Square 3" 2 1/8" 1 1/2" 1 1/6" Oblong 3" x 1 1/2" 3" x 1" 3" x 1/2" 2 1/8" x 1 1/6" 1 1/6" x 17/32" Octagon 3" Hexagon 3" 2" Triangle 3" 1 47/64" 1 5/32"	SIZES Square 6" 4 1/4" 3" 2 1/8" 1 1/2" 1 1/6" Oblong 9" x 3" 4 1/4" x 2 1/8" 6" x 4" 4 1/4" x 1 1/6" 6" x 3" 3" x 1 1/2" 6" x 2" 3" x 1" 6" x 1 1/2" 3" x 1/2" 6" x 3/4" 2 1/8" x 1 1/6" 6" x 1/2" 1 1/6" x 17/32" Octagon 6" 4 1/4" 3" Hexagon 6" 6" x 3" 4 1/4" 4 1/4" x 2 1/8" 3" 2" Pentagon 5 5/16" x 2 1/8" Triangle 3" 1 47/64" 1 5/32"
THICKNESS 1/2"	THICKNESS 1/2"

PAVING TILES

PAVING TILES. This term is a group designation for unglazed dust-pressed tiles $\frac{3}{4}$ inch thick. These are vitreous or semivitreous according to the Schedule.

FLINT TILES are unglazed vitreous paving tiles as listed.

HYDRAULIC TILES are unglazed semivitreous paving tiles as listed.

TRIMMERS. These are certain vitreous and semivitreous shapes to serve as coves, angles, bases, etc., in connection with the flat paving tiles, and are the same as made for Vitreous and Semivitreous tiles.

FLINT—Vitreous	Semivitreous—HYDRAULIC
GRADES Selected and Commercial	GRADES Selected only
COLORS White, light gray, dark gray, pearl gray, celadon, sage, light blue, dark blue, green, cream	COLORS Red, light gray, dark gray, buff, black, salmon, chocolate, and granites of these colors
SIZES Square 6" 4 $\frac{1}{4}$ " Oblong 6"x4" 6"x $\frac{1}{2}$ " 6"x3" Octagon 6" Hexagon 6" 4 $\frac{1}{4}$ "	SIZES Square 6" 4 $\frac{1}{4}$ " Oblong 9"x3" 6"x3" 10"x5" 6"x $\frac{1}{2}$ " Hexagon 6" 4 $\frac{1}{4}$ "
THICKNESS $\frac{3}{4}$ "	THICKNESS $\frac{3}{4}$ " and $\frac{21}{32}$ "

CORRUGATED PAVING TILES are semivitreous, unglazed, dust-pressed paving tiles $\frac{13}{16}$ inch thick and 6 inches square with a corrugated face.

ROUGH RED PAVING TILES are semivitreous, unglazed, dust-pressed tiles $\frac{1}{2}$ inch thick (except 9 x 9 inches, which are $\frac{5}{8}$ inch thick) in sizes 9x9, 9x4 $\frac{1}{2}$, 6x6, and 6x3 inches.

INLAID AND QUARRY TILES

INLAID OR ENCAUSTIC TILES are unglazed dust-pressed decorative tiles $\frac{1}{2}$ inch thick, produced by inlaying a figure or ornament of one or more colors into a body of a contrasting or harmonizing color before firing. They are vitreous or semivitreous according to the colors.

QUARRY TILES is a term for machine-made unglazed tiles, $\frac{3}{4}$ inch or more in thickness, made from common clays.

INLAID TILES	QUARRY TILES
GRADES Selected only	GRADES Selected only
COLORS Buff and red, buff and chocolate, black and buff, red, black, and buff, blue and white, white and sage, white, blue, and red	COLORS Red, red granite, light gray granite, dark gray granite, black granite, chocolate granite, light brown granite, dark brown granite, green granite
SIZES Square 6" 4 $\frac{1}{4}$ " 3" 2 $\frac{1}{8}$ " 1 $\frac{1}{2}$ " Oblong 6"x3" 4 $\frac{1}{4}$ "x2 $\frac{1}{8}$ " 6"x1 $\frac{1}{2}$ "	SIZES Square 9" 6"
THICKNESS $\frac{1}{2}$ "	THICKNESS 1" and $\frac{3}{4}$ "

TRIMMERS for Inlaid and Quarry Tiles are the same as those made for Vitreous and Semivitreous Tiles.

GLAZED TILES AND ENAMELS

WHITE GLAZED TILES. These are dust-pressed glazed tiles $\frac{1}{2}$ or $\frac{3}{8}$ inch thick according to size, with white body, and a bright finish transparent glaze.

ENAMELS are dust-pressed tiles $\frac{1}{2}$ inch thick with a *bright finish colored* glaze, transparent or opaque, on a white or colored body.

DULL GLAZED TILES are dust-pressed tiles $\frac{1}{2}$ inch thick with a *dull* finish and translucent or opaque glaze in white or colors on a white or colored body.

MATT GLAZED TILES are dust-pressed tiles $\frac{1}{2}$ inch thick with an opaque glaze devoid of all gloss in white or color on a white or colored body.

COLORS. The vagueness of color nomenclature prevents the preparation of a list of the almost endless number of colors and shades in which glazed tiles are produced. Selection should be made from samples and the color specified by number. Each member factory has its own range of colors and method of numbering.

TRIMMERS are tiles in standardized shapes such as coves, quarter-rounds, bases, caps, angles, architraves, mouldings, etc. They are furnished in bright, dull, or matt finish glazes and in Enamels.

GLAZED TILES AND ENAMELS

WHITE GLAZED	DULL AND MATT GLAZED AND ENAMELS
GRADES For regular sizes in bright finish: Selected, Standard, and Commercial; For other sizes: Selected and Commercial	GRADES Selected and Commercial
COLORS White	COLORS See opposite page
SURFACES AND FINISHES Bright only Plain or embossed	SURFACES AND FINISHES Glazed: Dull and Matt Enamels: Bright only Plain or embossed
REGULAR SIZES Square 6" 4 $\frac{1}{4}$ " Oblong 6"x3" 4 $\frac{1}{4}$ "x2 $\frac{1}{8}$ " 6"x2"	SIZES Square 6" 4 $\frac{1}{4}$ " 3" 2 $\frac{1}{8}$ " 1 $\frac{1}{2}$ " 1 $\frac{1}{16}$ $\frac{3}{4}$ " $\frac{1}{2}$ " Oblong 6"x3" 4 $\frac{1}{4}$ "x2 $\frac{1}{8}$ " 6"x2" 4 $\frac{1}{4}$ "x1 $\frac{1}{16}$ " 6"x1 $\frac{1}{2}$ " 3"x1 $\frac{1}{2}$ " 6"x1" 3"x1" 6"x $\frac{3}{4}$ " 3"x $\frac{1}{2}$ " 6"x $\frac{1}{2}$ " 3"x $\frac{1}{4}$ " 4 $\frac{1}{4}$ "x1 $\frac{1}{16}$ " 2 $\frac{1}{8}$ "x1 $\frac{1}{16}$ " Octagon 3" Hexagon 3" 2"
OTHER SIZES Square 3" 2 $\frac{1}{8}$ " 1 $\frac{1}{2}$ " 1 $\frac{1}{16}$ $\frac{3}{4}$ " $\frac{1}{2}$ " Oblong 6"x1 $\frac{1}{2}$ " 3"x1 $\frac{1}{2}$ " 6"x1" 3"x1" 6"x $\frac{3}{4}$ " 3"x $\frac{1}{2}$ " 6"x $\frac{1}{2}$ " 3"x $\frac{1}{4}$ " 4 $\frac{1}{4}$ "x1 $\frac{1}{16}$ " 2 $\frac{1}{8}$ "x1 $\frac{1}{16}$ " Octagon 3" Hexagon 3" 2"	
THICKNESS 1 $\frac{1}{2}$ " except 4 $\frac{1}{4}$ "x4 $\frac{1}{4}$ " 6"x3", 6"x2" and 4 $\frac{1}{4}$ "x2 $\frac{1}{8}$ " which are $\frac{3}{8}$ thick.	THICKNESS 1 $\frac{1}{2}$ "

PLASTIC TILES AND FAIENCE

PLASTIC TILES are unglazed plastic-made tiles in natural colors regardless of size, shape, or thickness.

FAIENCE is the name given to glazed plastic-made tiles regardless of size, shape, thickness, or color, in bright, dull, or matt finish.

COLORS. Because of the vagueness of color nomenclature and the almost unlimited possibilities and varied combinations of colors, it is impracticable to present even a partial list of the colors and finishes produced. Selection should be made from samples and the colors specified by the numbers which the member factories use for identification purposes.

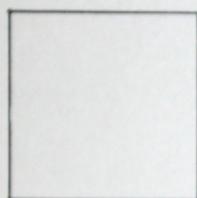
TRIMMERS. Bases, caps, mouldings, etc., in Plastic Tiles and Faience, are made in regular shapes and also special, according to effects desired.

PLASTIC	FAIENCE
GRADES Selected only	GRADES Selected and Commercial
COLORS Natural clay colors	COLORS See above
SURFACES AND FINISHES Smooth or rough Plain or embossed	SURFACES AND FINISHES Bright, dull, matt Plain or embossed
SIZES Obtainable in regular and special sizes. The production of special sizes is not subject to the same restrictions as in the dust-process, and special sizes can readily be made.	SIZES Obtainable in regular and special sizes. The production of special sizes is not subject to the same restrictions as in the dust-process, and special sizes can readily be made.
THICKNESS $\frac{1}{2}$ " and over, according to size and conditions	THICKNESS $\frac{1}{2}$ " and over, according to size and conditions

GLAZED TILES AND ENAMELS

Surface finish ~ bright glaze ~ dull glaze ~ matt glaze

All these shapes can be made in either white or colored glazes. For "regular" sizes in white glaze see Schedule



6" x 6"



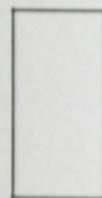
6" x 6" Diag. ½



6" x 4 ½"



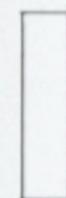
6" x 4"



6" x 3"



6" x 2"



6" x 1 ½"



6" x 1"



6" x 2/3"



6" x 1/3"



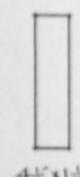
4 ½" x 4 ½"



4 ½" x 4 ½" Diag. ½



4 ½" x 2 ½"



4 ½" x 1 ½"



3" x 3"



3" x 3" Diag. ½



3" x 1 ½"



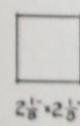
3" x 1"



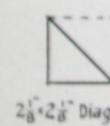
3" x 1/3"



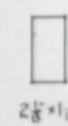
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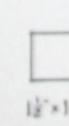
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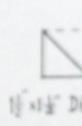
2 ½" x 2 ½" Diag. ½



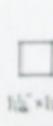
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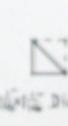
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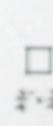
1 ½" x 1 ½" Diag. ½



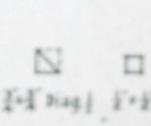
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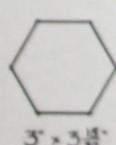
1 ½" x 2/3"



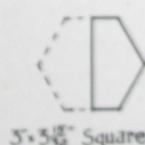
1 ½" x 2/3" Diag. ½



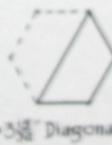
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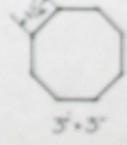
3" x 3 ½"



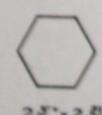
3" x 3 ½" Square ½



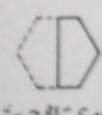
3" x 3 ½" Diagonal ½



3" x 3"



2 ½" x 2 ½"



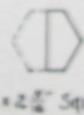
2 ½" x 2 ½" Square ½



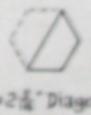
2 ½" x 2 ½" Diagonal ½



2 ½" x 2 ½"



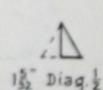
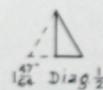
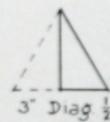
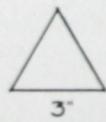
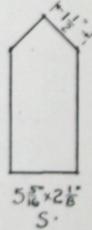
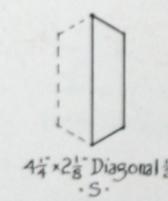
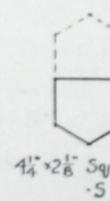
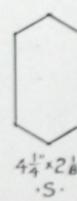
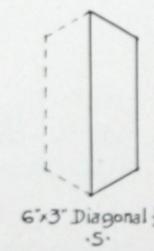
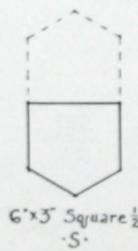
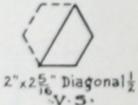
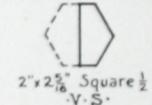
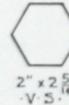
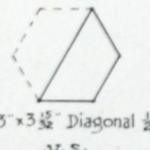
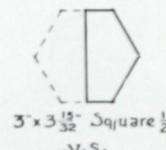
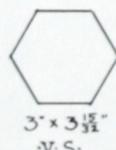
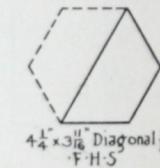
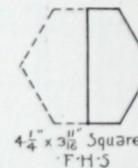
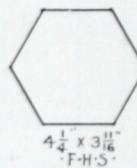
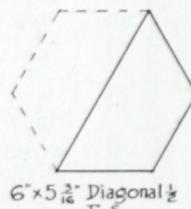
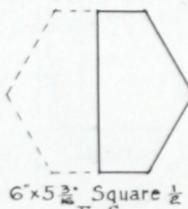
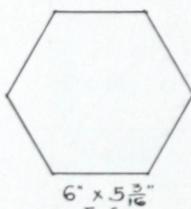
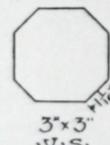
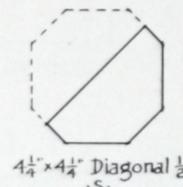
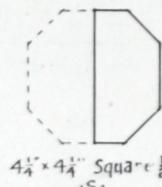
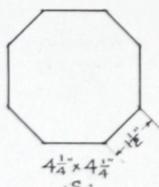
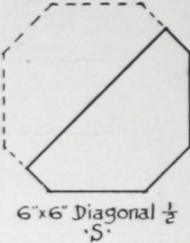
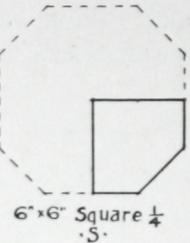
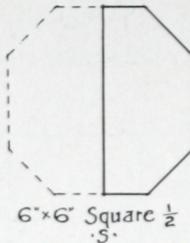
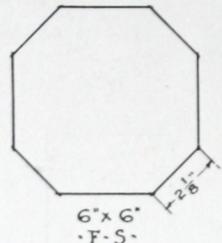
2 ½" x 2 ½" Square ½



2 ½" x 2 ½" Diagonal ½

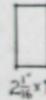
UNGLAZED TILES

KEY: F = FLINT • H = HYDRAULIC • S = SEMI VITREOUS • V = VITREOUS
 $\frac{3}{4}$ " Thick $\frac{5}{8}$ " Thick $\frac{1}{2}$ " Thick $\frac{1}{2}$ " Thick



CERAMIC MOSAIC

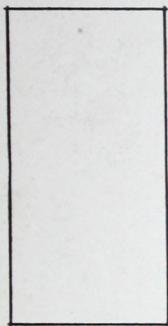
$\frac{1}{4}$ " thick



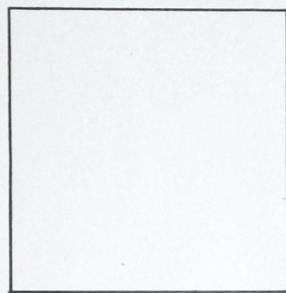
Copyright 1921 by The Associated Tile Mfrs.

UNGLAZED TILES

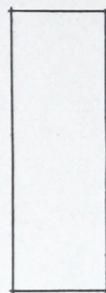
KEY: F=FLINT + H=HYDRAULIC + I=INLAID + Q=QUARRY + S=SEMI VITREOUS + V=VITREOUS
 $\frac{3}{4}$ " Thick $\frac{3}{4}$ " Thick $\frac{1}{2}$ " Thick $\frac{3}{4}$ " to 1" thick $\frac{1}{2}$ " Thick $\frac{1}{2}$ " Thick



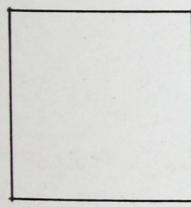
10" x 5"
H



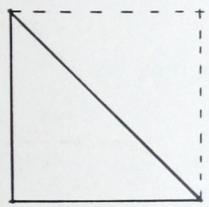
9" x 9"
Q



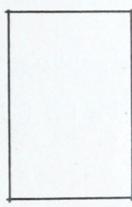
9" x 3"
S



6" x 6"
F·H·I·Q·S·



6" x 6" Diag. $\frac{1}{2}$
F·S·



6" x 4"
F·S·



6" x 3"
F·H·I·S·



6" x 2"
S·



6" x $\frac{1}{2}$ "
I·S·



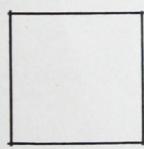
6" x 1"
S·



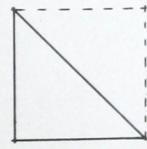
6" x $\frac{3}{4}$ "
F·H·S·



6" x $\frac{1}{2}$ "
F·H·S·



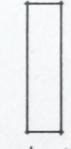
4 $\frac{1}{4}$ " x 4 $\frac{1}{4}$ "
F·H·I·S·



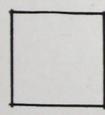
4 $\frac{1}{4}$ " x 4 $\frac{1}{4}$ " Diag. $\frac{1}{2}$
F·S·



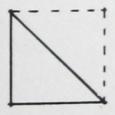
4 $\frac{1}{4}$ " x 2 $\frac{7}{8}$ "
I·S·



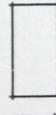
4 $\frac{1}{4}$ " x 1 $\frac{1}{16}$ "
S·



3" x 3"
I·V·S·



3" x 3" Diag. $\frac{1}{2}$
V·S·



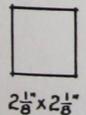
3" x $\frac{1}{2}$ "
V·S·



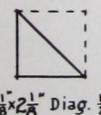
3" x 1"
V·S·



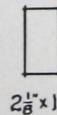
3" x $\frac{1}{2}$ "
V·S·



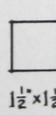
2 $\frac{1}{8}$ " x 2 $\frac{1}{8}$ "
I·V·S·



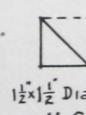
2 $\frac{1}{8}$ " x 2 $\frac{1}{8}$ " Diag. $\frac{1}{2}$
V·S·



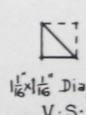
2 $\frac{1}{8}$ " x 1 $\frac{1}{16}$ "
V·S·



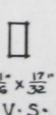
1 $\frac{1}{2}$ " x 1 $\frac{1}{2}$ "
I·V·S·



1 $\frac{1}{2}$ " x 1 $\frac{1}{16}$ "
V·S·



1 $\frac{1}{2}$ " x $\frac{1}{8}$ "
Diag. $\frac{1}{2}$
V·S·



1 $\frac{1}{2}$ " x $\frac{1}{16}$ "
V·S·

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